ABSTRACT

The invention relates to trellis code decoder. The decoder comprises a path metrics calculation unit for calculating path metrics over at least two trellis columns in a trellis, and a memory for storing path metrics of the trellis. The decoder further comprises an input multiplexer connected between the read interface of the memory and the input interface of the path metrics calculation unit, and an output multiplexer connected between the output interface of the path metrics calculation unit and the write interface of the memory. The decoder further comprises a control for controlling configuration of the input multiplexer and configuration of the output multiplexer on the basis of states of the trellis, which state of the trellis defines the way the old path metrics and the new path metrics relate to each other, whereby internal configuration of the path metrics calculation unit remains the same for different code constraint lengths.